COTTON CHATS

FROM

DRAPER COMPANY

SHIPMAN'S
COMMON-SENSE BINDER

PATENTED

JANUARY 19, 1892. APRIL 19, 1904

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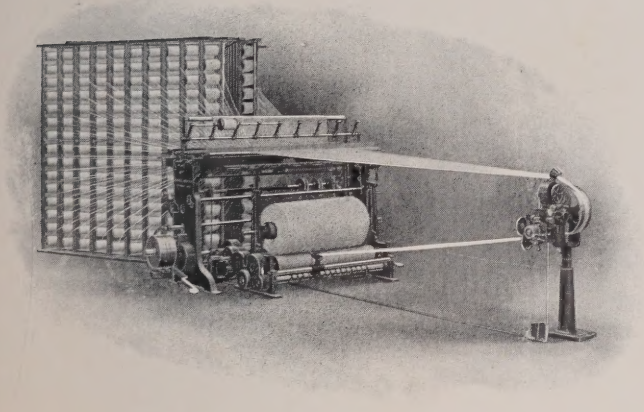
ASA L. SHIPMAN'S SONS
MANUFACTURERS,
NEW YORK.

COTTON CHATS

By the Secretary of the
DRAPER COMPANY,
HOPEDALE, MASS.

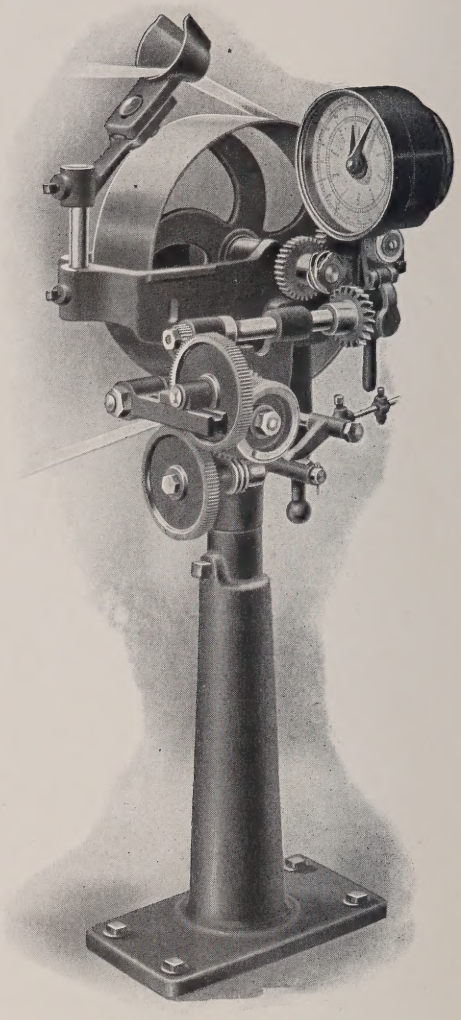
No. 41. JULY, 1905.



OUR NEW BALLING MACHINE.

We have recently made several quite important improvements in our balling machine, which we have thoroughly tested out in actual practice, before approving of the same as our regular trade standards. There are various methods of making chain warps, some mills preferring to make chains containing a large number of ends; the majority, however, using chains with 500 ends, or less. No one machine will suit both methods.

We sell our Walcott warper for chains over 500 ends, but recommend the balling machine for a smaller number. In our second edition of our catalogue, Textile Texts, we heralded the advent of a four-ball warper which promised well, and the use of this style led to the present improvement. The object of the four-ball warper was to save in waste, as it was difficult to measure four balls on four different machines accurately enough so that all four would run out substantially alike. We have accomplished the same result; that is, ensured the accurate measuring of the chain by a much simpler method, as we now measure direct from the pulley, and as the pulley is of large surface and has practically nothing to do, except guide the chain and rotate the indicator, there is little or no liability for slip.



The cut of the entire machine shows the whole apparatus, the ball being wound on the separate rolls, which give large frictional driving power, and also shows the stopping connection from the pulley back to the machine. The detail of the pulley apparatus is shown more in detail on the separate cut. The connection to the warper, however, in this case is not illustrated.

The problem of measuring accurately has engaged our attention for many years. With the ordinary warper, we find our cylinder measuring system giving excellent results, but we found that it was not advisable to wind balls direct from the cylinder on the warper as formerly, especially since heavier balls have come into use.

We might caution our customer about the use of yarn for either balling machines or warpers that is made into a heavy spool load, unless special pains are taken to ensure ease of rotation at the creel. Where a large number of heavy spools are used, it requires a very appreciable pull to start them in rotation, and every possible means of lessening friction should be adopted.

PATENT REPORT FOR 1904.

Having just received the annual report of the Commissioner of Patents, we have been looking the same over carefully, to make a brief comparison of concerns which do a large patent business. The casual observer of the report would find it quite misleading, if attempting to make a correct analysis, for a list of Draper Company patents, for instance, apparently only shows 55 assigned to Draper Company during 1904; when, as a matter of fact, this means that 55 different inventors assigned patents to that Company, The General Electric Company leads, as usual, in this particular respect, having had 134 different inventors assign patents to them last year. We come second, and the Westinghouse Electric and Manufacturing Company third, with 46. Each of us is connected, in a way, with other companies, whose patent business we control, so that all figures would read larger with the sub companies included.

Taking patents in quantity, we find by our own records, that we purchased, or acquired control, either in our own Company or associate companies, 128 of the patents granted in 1904. Some of these assignments would not appear on the Patent Office records, so that the number cannot be fully checked by the record. There is no question but that the General Electric Company, therefore, stand not only at the head of the list, but far above the nearest competitor. We seem to be in second place; although it is possible that the Westinghouse companies, as a whole, might press rather close. The different Westinghouse companies are apparently separate concerns, with no necessary affiliation. The Westinghouse Electric & Mfg. Company appears to have 74 patents assigned to it, by its 46 inventors. The Westinghouse Air Brake Company, the Westinghouse Automatic Air & Steam Coupler Company, the Westinghouse Machine Company, and George Westinghouse, individually, control many patents, the Air Brake Company having 18 inventors, and the Machine Company 10.

Taking those concerns next in order by number of inventors transferring patents, we find the International Harvester Company, with 29 inventors; the National Cash Register Company, with 25; the Western Electric Company, with 22; Stanley Electric Company with 20; the National Tube Company, with 17; the Crompton & Knowles Loom Works, with 16; the United Shoe Machinery Company, with 15; the Underwood Typewriter Company, with 14;

the Otis Elevator Company, with 14, etc. There are some foreign firms also having numbers sufficient to rank in with some of these. The professional inventors appear to keep up their accustomed average; Thomas A. Edison took out 18 patents in 1904, Francis H. Richards, 14, and Isidor Kitsee, 24.

Curiously enough, while Connecticut has the greatest number of inventors per population, there are no large corporations owning any really large number of inventions, manufacturing in that state. The same might be said of the District of Columbia, which is second in proportion of inventors to population. Massachusetts, which comes third, certainly does very well. It is a little difficult to understand where the patents invented in Colorado and California, which stand fourth and sixth respectively, are sold or developed.

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The Massachusetts Bureau of Statistics of Labor have just published a pamphlet on "Cotton Manufacturers in Massachusetts and The Southern States," being Part II of the Annual Report for 1905. On page 88 appears the following paragraph:

"*So far as the equipment of the Southern mills in the matter of looms is concerned, they are certainly more advanced than any other part of the country, Massachusetts not by any means excepted. Nearly all the Southern mills are equipped with the Northrop loom, which is considered the most improved and supplied with the latest inventions. The great advantage, so far as the South is concerned, lies in the fact that one operative can attend to from 16 to 20 of these looms, and therefore the Southern mills look upon the Northrop as a means of salvation in their present shortage of help.*"

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We quote the following from a report rendered by one of our travelling men in June 1905:

"*I have never seen the loom run as steadily as they are today. Mr.------- overseer of weaving, tells me that he is getting 92 per cent. product right along, and has a large number of looms on 100s warp and 120s filling. The weavers run 16 looms each, and about every weaver has two looms out of the 16 running with two shuttles, cotton warp and silk filling, very light goods which they are making on the Northrop loom because they get better goods than they can on the--------(Another make of loom.)*

COTTON CHATS

By the Secretary of the

DRAPER COMPANY,

HOPEDALE, MASS.

No. 42. AUGUST, 1905.

EQUIPMENT OF COTTON MILLS

IN NORTH AND SOUTH CAROLINA, HAVING 500 OR MORE LOOMS.

(GINGHAM AND FANCY WEAVE MILLS NOT INCLUDED.)

Mills having more than half their equipment Northrop Looms have figures in large type.

NORTH CAROLINA.

NAME OF MILL.	JULY 1ST. TOTAL LOOMS.	JULY 1ST. NORTHROP LOOMS.	Common Stock Quotations published by F. C. Abbott & Co. BID.	ASKED.
Brookford Mills,	500			
Henrietta Mills,	2867	101		200
Hoskins Mills,	**580**	**580**	**100**	
Louise Mills,	552	152		95
Cabarrus Cotton Mills,	**542**	**542**	**137½**	
Cannon Mfg. Co.,	996	426	174	200
Gibson Mfg. Co.,	519	106	90	
Odell Mfg. Co.,	1725	40		96
Cooleemee Cotton Mills,	**1296**	**1296**		
Erwin Cotton Mills Co.,	**1901**	**1901**		
Golden Belt Mfg. Co.,	640			
Durham Cotton Mfg. Co.,	820	300		
Ashley & Bailey Co.,	1200			
Loray Mills,	**1660**	**1660**		
Mineola Mfg. Co.,	500			
Oneida Cotton Mills,	603			
Proximity Mfg. Co.,	1105			
Revolution Cotton Mills,	**808**	**808**		
White Oak Cotton Mills,	2000			
Holt Granite Mfg. Co.,	863			
Dilling Cotton Mills,	552		60	
Roanoke Mills Co.,	600	120	129	
Steele's Mills,	**600**	**600**		
Sanford Cotton Mills,	580			
Leaksville Cotton Mills,	632			
Nantucket Mills,	806	32		

SOUTH CAROLINA.

Abbeville Cotton Mills,	**940**	**940**	**87½**	**91**
Anderson Cotton Mills,	1864	724	105	108
Brogon Mills,	864	366		87
Gluck Mills,	608		80	100
Orr Cotton Mills,	**1504**	**1504**		**109½**
Arkwright Mills,	604		117	120
Aiken Mfg. Co.,	792	39	84	89
Belton Mills,	**1240**	**1240**	**105**	**108**
Buffalo Cotton Mills,	2000			87
Norris Cotton Mills Co.,	452		100	105
Cherokee Falls Mfg. Co.,	608		115	

	TOTAL LOOMS.	NORTHROP LOOMS.	STOCK QUOTATIONS BID.	ASKED.
Clifton Mfg. Co.,	2660	1000	102	
Clinton Cotton Mills,	900			
Granby Cotton Mills,	**1542**	**1014**		
Olympia Cotton Mills,	**2250**	**2250**		
Richland Cotton Mills,	750		49	
Darlington Mfg. Co.,	1400	592	73	79½
Easley Cotton Mills,	**1000**	**1000**	**112**	
Glenwood Cotton Mills,	542	96	92	101
Enoree Mfg. Co.,	986		87	
Gaffney Mfg. Co.,	**1401**	**1401**	**70**	**75**
Converse, D. E., Co.,	**1068**	**550**		**118**
Graniteville Mfg. Co.,	**1698**	**954**	**150**	**160**
American Spinning Co.,	**758**	**758**	**110**	
Brandon Mills,	**992**	**992**	**99**	**102**
Mills Mfg. Co.,	**816**	**560**	**99**	**102**
Monaghan Mills,	**1262**	**1262**	**100**	**104**
Poe, F. W., Mfg. Co.,	1519	26	125	135
Woodside Cotton Mills,	900			91
Greenwood Cotton Mill,	684		98	101
Grendel Mills,	**832**	**498**	**100½**	**106**
Victor Mfg. Co.,	**1309**	**1309**	**113**	**115**
Hartsville Cotton Mill,	**650**	**650**	**82**	**86**
Chiquola Mfg. Co.,	**1000**	**1000**		**86**
Lancaster Cotton Mills,	1578		100	105
Langley Mfg. Co.,	1300		90	96
Laurens Cotton Mills,	1290	522	170	178
Watts Mills,	708			86
Lockhart Mills,	**800**	**800**	**94**	**96**
Mollohon Mfg. Co.,	**672**	**352**		**86**
Newberry Cotton Mills,	900	26	119	
Courtenay Mfg. Co.,	635		99½	102
*Pacolet Mfg. Co.,	**1162**	**1162**	**145**	**151**
Pelzer Mfg. Co.,	**3400**	**2682**	**170**	
Piedmont Mfg. Co.,	2066	640	175	
Saxon Mills,	**620**	**320**	**100**	**104**
Spartan Mills,	**2591**	**1880**	**135**	**140**
Tucapau Mills,	**1759**	**1759**	**125**	**138**
Monarch Cotton Mills,	**980**	**980**		**85**
Union Cotton Mills,	2400			131
Walhalla Cotton Mills,	510	120	100	103
Warren Mfg. Co.,	**1000**	**1000**	**95**	**102**
Glen Lowry Mfg. Co.,	**873**	**873**	**101**	
Whitney Mfg. Co.,	**740**	**626**	**118**	
Williamston Mills,	600		97	100
Fairfield Cotton Mills,	500	190		66
Woodruff Cotton Mills,	**750**	**750**	**101**	**104**
	91,676	44,071		

*The Pacolet Co. have also 1764 Northrop looms at Gainesville, Ga.

This list is intended to show the comparative introduction of Northrop looms in these two prominent Southern states. We leave out gingham and fancy weave mills because our Northrop filling-changer is not yet introduced on such goods to any large extent.

The leaving out of the smaller mills unfortunately prevents our citing many prosperous concerns; in fact, we have sold looms to some 30 of them in these two states, furnishing the entire loom equipment for 16 out of the 30. Many of these mills are bound to grow into larger mills; in fact, many of the large mills in the list represent smaller mills that have doubled, or still further enlarged their equipment.

Of course, it is understood that many of the mills above named had an equipment of common looms before our Northrop loom was introduced. Some of the newer mills, which have no Northrop looms, did not raise sufficient money to pay for their extra cost, or offered us long time payments, or stock payments, which we could not accept. We believe the Northrop loom mills, as a whole, are more prosperous and satisfactory than those with common loom equipment. They certainly are suffering less from the present scarcity of labor. It is, of course, possible to find Northrop loom mills which have not prospered, but the conditions in such cases have been peculiar and easily explainable.

The stock quotations are highly significant, especially when it is known that the greater proportion of the new mills are Northrop, and some of them have not as yet had much time in which to earn surplus. The old and prosperous mills are quite uniform in their appreciation of our machines. We have taken the stock figures as published in the American Cotton Manufacturer for Aug. 3, supplementing in a few vacancies by figures in Boston Journal of Commerce for Aug. 5.

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We have just purchased a work printed in London, entitled "Model Factories and Villages," by Budgett Meakin. The articles therein cover the leading manufacturing countries. Mr. Meakin came to Hopedale without invitation, and made his investigations independently, taking such photographs as he cared to. He finds many interesting conditions in industries connected with textile manufacture, and refers especially to the Ludlow Mills, the Deering Twine Works, the Exposition Mills, the Proximity Mills, Pelzer Manufacturing Company, Willimantic Linen Company, Cheney Brothers Manufacturing Company, Swifts Manufacturing Company, the Whitin Machine Works, the Plymouth Cordage Company, and our own village of Hopedale. We are rather pleased at his reference to our town, as he specifies our conditions as illustrating "America's best." A foreigner is often impressed by peculiarities which differ from the custom of his own country, as illustrated in the following paragraph:

"*A peculiarly fine effect is produced in Hopedale, as*

in all high-class American villages, by the absence of front palings, or walls and gates, so that on both sides the roads are bordered by lawns down to the 'sidewalk,' and the whole presents a spacious park-like appearance. The advantages of this plan over the conventional English front pen cannot be too strongly insisted upon: it would be the saving of many a mean suburban street in this country. The idea that dogs and children need to be kept out is derived from the unfortunate experience resulting from an open gate under existing circumstances. When there are no walls and no gates, no temptation to trespass is offered, unless it be to 'cut off a corner,' which is easily provided against by stretching a wire some inches above the ground, the efficiency of which as a toe-trap has been tested by the writer. Iron fencing between the houses preserves the back premises from invasion, and the fronts being entirely open, everyone with credit at stake may be relied on to keep his section up to standard. Hopedale is especially fortunate, too, in possessing some 150 acres of park, including six acres of playground, and a very pretty broken piece of water running its whole length."

While we are proud of our town and interested in the welfare of our workmen, we are not attempting to compete with the business philanthropy, which often goes to a questionable extreme. We note in Mr. Meakin's book, reference to certain concerns which provide beds for the rest of tired help during working hours. Another concern not only provides a parlor with piano and general equipment, but also takes pains to frequently change the engravings hung on the wall. It is rather amusing to note that a corporation which provided free washing for all the towels used by the workmen, encountered a strike because the old women hired from charitable motives to do the washing, did not belong to the union. The result is that the help can now wash their own towels. It is curious to note that certain foreign firms serve out free beer and liquor to workmen engaged in certain occupations.

In a former Cotton Chats, I referred to the possibility of Northrop loom weavers needing physical culture exercises to keep up their appetites, but certain American companies have anticipated this requirement by not only providing gymnastic apparatus, but also dance halls in the factory itself, with regular classes.